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ABSTRACT

By using small-scale artificially created archaeologic sites, a teacher can provide students with a time-efficient approach in which to master some basic archaeological techniques. In an artificially created setting, the students can become familiar with conditions they might meet in the field. In a short period of time, students may be exposed to a wide range of archaeological situations, data, and site types. This technique allows flexibility as far as size of site and level of sophistication. The site can be mapped ahead of time with features drawn in such as post molds and pits. The instructor can create realistic features and use artifacts in a planned, goal-oriented way. After students have been taught mapping and excavation techniques in the classroom, they can take these skills and use them at the actual excavation. Already broken artifact reproductions can be recovered and reconstructed. Artifacts and animal remains can be analyzed. At the end of the exercise, summaries of findings can be presented and discussed. This process gives a true feeling of what archaeological investigation is like, not only the digging, but also the thought processes used by trained archaeologists. An appendix gives a list of sources for artifact reproductions. (NE)

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USE OF SMALL-SCALE ARTIFICIAL ARCHAEOLOGICAL SITES IN THE TEACHING OF ARCHAEOLOGY

PRESENTED AT THE 80th ANNUAL MEETING
OF THE AMERICAN ANTHROPOLOGICAL ASSOCIATION
December 5, 1981

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Archaeological research, unlike research conducted in the physical sciences, has an inherent problem. When an archaeological site is excavated it is also being destroyed. In a field such as chemistry, on the other hand, experiments are continuously replicated with no damage done to a unique specimen. Until now the student archaeologist received his field experience in what may essentially be called "on-the-job training." In this traditional framework the new student, with or without any classroom instruction, began his archaeological fieldwork on an actual archaeological site. It follows that a student lacking experience may inadvertently destroy information which could never be replaced.

Some may argue that this risk factor is generally low if the student's work were to be conscientiously supervised. However, if a student could master some basic archaeological techniques in an artificial setting and become familiar with conditions he might meet in the field, this unintentional loss of data might be avoided completely. By using artificially created archaeological sites the needed training may be accomplished. In addition, the use of the techniques proposed here result in a more time efficient approach to teaching archaeology. Since the instructor has set up the site beforehand, the students will not spend long hours or days working on sterile areas. Therefore, even in situations where only a very limited time in the field may have been allotted for a particular course, a great deal may be accomplished.

In a short period of time the student may be exposed to a variety of archaeological situations and data. This is a particular advantage in geographic areas where there are no readily available archaeological sites to excavate. Even if there are local sites in the area, it is possible to create a wide range of site types, far exceeding that which may be found in any single local region. By using various site types a student who never leaves his immediate college area during his period of instruction may excavate sites which may only be found thousands of miles away. This is most useful if the instructor is training a student for fieldwork in another geographical area.

There is tremendous flexibility in this technique on several additional levels. The size of the site may be adjusted to the availability of space, the number of students, and other related factors. The smallest workable unit is probably the five foot square, but the area may be much larger. The level of sophistication may also be varied according to the prior experiences of the students involved.

This technique was developed at Georgian Court College in Lakewood, New Jersey. It is used in Anth 111: Introduction to Physical Anthropology and Archaeology, a one semester course taught each fall. Class size ranges from 15-25. Approximately two-thirds of the course is devoted to physical anthropology, leaving only a few weeks for archaeology. Since this is, for most students, their first exposure to archaeology, much of the time allotted to this study must be spent learning basic concepts. While it is possible to introduce students to archaeology in this way, it was felt that

an alternative method should be explored. It was at this point that the use of artificially created sites began.

Creation of such sites is not a totally new concept. However, the way that they are used at Georgian Court College is different from the norm. When one hears about artificial archaeological sites, what is usually being described is the digging of a hole and removing items which had previously been thrown in. It is such a view of these sites which gives them a bad name among professionals.

Due to the nature of the course involved, the time for the actual field excavation would be limited to a few hours on a single afternoon. The size of the archaeological unit was therefore restricted to the five foot square. The goal of this excavation is to give students their first exposure to archaeological research, and this may be accomplished with a small excavation.

During the summer the site for the field excavation is prepared. A five foot square is dug to a level that varies depending upon the depth of the topsoil. When the subsoil is reached a level dirt floor is created. The use of artifacts here is rather simple. The instructor may arrange them depending upon his goals. The creation of features takes a little more planning. The site is mapped ahead of time with features such as post molds and pits drawn in. Creation of realistic features and use of artifacts in a planned, goal-oriented way is what clearly separates this technique from the old haphazard method of just throwing artifacts into a hole.

Post molds are created by digging conical holes and filling them with either darker topsoil or powdered charcoal; these show up quite well when cross sectioned. Pits are dug in the dirt floor

and filled with artifacts, animal remains, or both. With practice and imagination the types of features and their quality are almost unlimited.

The site is allowed to settle for at least six weeks to ensure that the soil will become compact enough to make the excavation more realistic. The class is then divided into four teams with each responsible for one, two-and-a-half foot square section of the excavation. The materials required for a class of 15-25 students are: 4 trowels, 4 clipboards, 4 eight-foot tape measures, 4 brushes, graph paper, paper bags, string, plumb bob, rulers, and felt tip markers. The students are taught mapping and excavation techniques in the classroom, including the use of a standard grid system, cross sectioning of features, and basic fieldwork procedures.

During the actual excavation the students are encouraged to change roles so that all do some excavation (mostly trowel work), mapping, and recording. Even in this small unit the students are exposed to post molds, various types of artifacts, animal remains, and a pit.

Figure one is a sketch of the proposed unit. The site is supposed to represent a part of a roundhouse. Note that there are no artifacts or features on the outside curve of the partial circle indicated by the post molds. From this information the student should be able to distinguish between the inside and outside of the house and estimate its size. In order to give the students some practice in settlement pattern analysis and to expand the scope of the educational experience without expanding the excavation, a map of an entire village is used. The excavation will be indicated

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EXCAVATION MAP

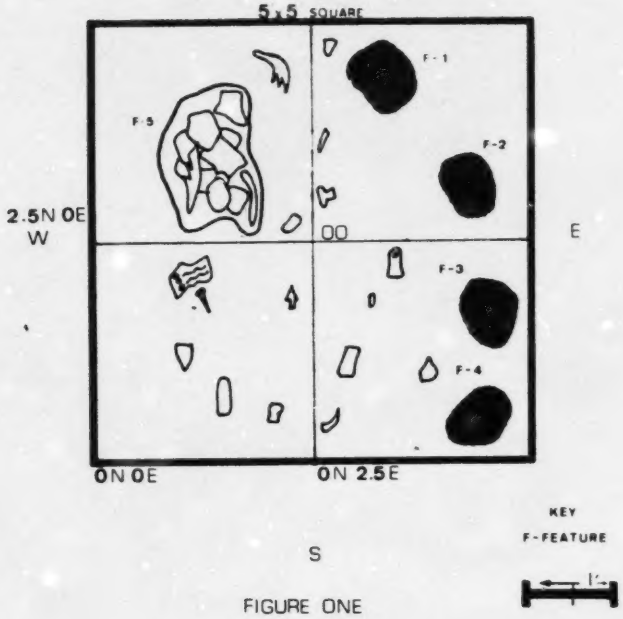

FIGURE ONE

on the map as a tiny portion of the entire village. (See Figure two.) Through use of a ceramic reproduction, which comes already broken into fourteen pieces, the students get the opportunity to reconstruct a complete ceramic vessel. (See Appendix for a list of sources for artifact reproductions.) In the excavation the broken pot was found in the small pit along with other items. By using a water soluble glue the pottery vessel can be reconstructed and then broken into its fourteen parts for next year's excavation.

After the excavation is completed the students take their artifacts, which have been labeled and placed in bags, and maps

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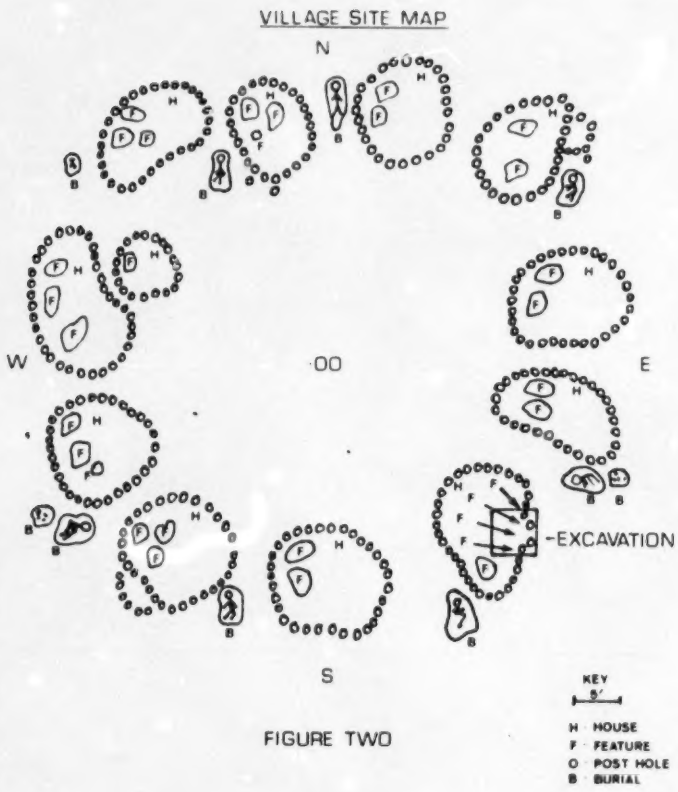

FIGURE TWO

back into the classroom. Someone is assigned to work on the pottery reconstruction while the rest of the students combine their four separate maps into one large map for the entire five foot square. At the same time artifacts and animal remains are being analyzed. Students gather as much information as possible from the data. At this point each team summarizes its findings from the section of the excavation involved and presents the team view of the significance of the entire excavation. The discussion is generally lively and insightful.

The use of artificial archaeological sites has been shown to

give the student a true feeling for what archaeological investigation is like. The technique goes far beyond the digging of artifacts. The student is led to experience the same kind of thought processes that are used by professional archaeologists both in the field and in the laboratory. Using artificial archaeological sites to achieve this purpose may even be superior to using real sites in many instances.

In this time of budget cut-backs, a technique for training archaeologists which is both time- and cost-efficient should be well-received by administrators. Through use of artificial archaeological sites there is now an opportunity to bring to students who would otherwise not have had a chance to experience field archaeology firsthand, meaningful exposure to this type of research. With fewer and fewer sites becoming available to excavate, the use of artificial archaeological sites may be the only alternative for the training of future archaeologists.

APPENDIX

List of Sources for Artifact and Animal Reproductions

Dover Scientific Company
Box 6011
Long Island City, New York 11106

NASCO
901 Janesville Avenue
Fort Atkinson, Wisconsin 53538

NASCO
P.O. Box 3837
1524 Princeton Avenue
Modesto, California 95352

Nova Scientific Corporation
111 Tucker Street
P.O. Box 500
Burlington, North Carolina 27215

Ward's Natural Science Establishment, Inc.
P.O. Box 1712
Rochester, New York 14603